Then we have to make some ection, which ensures that adequate space availablee over one side of the mesh (Fig. 1). Then roll the mesh into a rod and tie both end with silk (Fig. 2). After all handicraft procedure, put this rod into pre-peritoneal space. Then fixed one end of the rod near pubic tubercle (with forceps or tack), the other end over lateral side of abdominal wall (Fig. 3). Cut the silk suture and then pull the stat suture of 3.0 vicryl – the mesh placement was done amazingly.
Results: By using this technique, time for mesh placement is lessened thus operative time is also reduced. The mesh could be placed more flat and neat than before.
Conclusion: Laparoscopic total extra-peritoneal repair (TEP) is more comfortable for the patient than traditional open method. However, TEP might have some disadvantages, such as increased cost, lengthier operation, steeper learning curve, and most importantly, results in higher recurrence and complication rates early in a surgeon's experience.
While using this rolling method, mesh placement could be easier and more efficient than traditional method. It is easy learning and may shorten the learning curve of mesh placement. Since our procedure was easily performed, we believe it is worth imitating for urologists who just begin to learn the skill of TEP.

Andrology

NDP077:
HERB-DRUG INTERACTION OF EPIMEDIUM EXTRACT ON THE PHARMACOKINETIC OF DAPOXETINE IN RAT

Thomas Y. Hsueh [1,2,6], Jing-Kai Ho [3], Lie-Chwen Lin [4], Allen W. Chiu [1,6], Chi-Hung Lin [5], Tung-Hu Tsai [2,7]. [1] *Division of Urology, Department of Surgery, Taipei city Hospital Renai branch, Taipei, Taiwan;* [2] *Institute of Traditional Medicine, School of Medicine, National Yang-Ming University, Taipei, Taiwan;* [3] *Institute of Pharmacology, School of Medicine, National Yang-Ming University, Taipei, Taiwan;* [4] *National Research Institute of Chinese medicine, Ministry of Health and Welfare, Taipei, Taiwan;* [5] *Institute of Microbiology and Immunology, National Yang-Ming University, Taipei, Taiwan;* [6] *Department of Urology, School of Medicine, National Yang-Ming University, Taipei, Taiwan;* [7] *School of Pharmacy, College of Pharmacy, Kaohsiung Medical University, Kaohsiung, Taiwan*

Purpose: The aim of study is to develop a high performance liquid chromatography tandem mass spectrometry (LC-MS/MS) method to investigate the pharmacokinetic interaction of Epimedium extract on the dapoxetine in rats.
Materials and Methods: Experimental rats were divided into the following four parallel groups: (1) dapoxetine alone (10 mg/kg, i.v.); (2) oral administration of Epimedium extract (2 g/kg) for 3 consecutive days and on the fourth day dapoxetine was administered (10 mg/kg, i.v.); (3) dapoxetine alone (10 mg/kg, p.o.); (4) oral administration of Epimedium extract (2 g/kg) for 3 consecutive days and on the fourth day dapoxetine was administered (10 mg/kg, p.o.). The dapoxetine and internal standard (nylidrin) were determined by a high-performance liquid chromatography-tandem mass spectrometry (HPLC-MS/MS) and separated by a C_{18} column (100 x 2.1 mm, 1.7 μm). The data was obtained in positive electrospray mode.
Results: The calibration curves of dapoxetine were acquired over a concentration ranges from 1 to 500 ng/mL with the $R^2 = 0.999$. The mean matrix effects and extraction recoveries of dapoxetine at three different concentrations (1, 10, 500 ng/mL) ranged from 107.3 to 110.9% and from 25.5 to 28.2% respectively. The interday and intraday relative standard deviation were both <6% while the bias were both <14%. The oral bioavailability of dapoxetine was about 75% in rat.
Conclusion: The pharmacokinetic results demonstrated that pretreated with/without Epimedium extract for three consecutive days did not significant alter the pharmacokinetics of dapoxetine in rat.

NDP078:
SIGNIFICANT PREDICTIVE FACTORS FOR SUBFERTILITY IN MEN WITH SUBCLINICAL VARICOCELE

Saint Shiou-Sheng Chen [1,2]. [1] *Department of Urology, National Yang-Ming University School of Medicine, Taiwan;* [2] *Division of Urology, Taipei City Hospital HepingFuyou Branch, Taipei, Taiwan*

Purpose: To determine the useful parameters for predicting subfertility in patients with subclinical varicocele (SV) by a retrospective study.
Materials and Methods: Between June 2001 and February 2011, 150 men with SV, and 17 age-matched men without SV were recruited. They were divided into three groups: Group 1 with subfertile patients (n = 15), Group 2 with fertile patients (n = 135), Group 3 with control patients (n = 17), respectively. The parameters for evaluation and comparison were included age, body mass index, semen analysis and PH, testicular volume, scrotal temperature, resistive index (RI), pulsatility index (PI) and peak retrograde flow (PRF) by color Doppler ultrasound.
Results: Of 150 patients with SV, 120 (80%) were left; 22 (14.7%) bilateral and 8 (5.3%) right. Subfertile patients (Groups 1) with SV had significantly lower testicular volume, higher scrotal temperature, RI, PI and PRF than fertile men with subclinical varicocele (Groups 2) and control group (Groups 3). Elderly men (>50 years, n = 30) with SV had a significantly higher incidence of bilateral SV (9/30; 30% vs. 11/120; 9.2%) than young men with SV. No significant difference was noticed for age, body mass index and semen PH among the patients in three groups.
Conclusion: Patients with SV may suffer from subfertility regardless of age. More attention should be given to SV patients with RI>0.55ml/sec, PI>0.99 ml/sec, total testicular volume <27 cc, scrotal temperature> 34.94°C and PRF >29 cm per second.

NDP079:
INCREASED RISK OF ERECTILE DYSFUNCTION IN PATIENTS WITH OBSTRUCTIVE SLEEP APNEA: A NATIONWIDE STUDY

Chih-Cheng Lu, Wen-Chou Fan. *Division of Urology, Department of Surgery, Chi Mei Medical Center, Liouying, Tainan, Taiwan*

Purpose: Obstructive sleep apnea (OSA) syndrome is a disease with recurring episodes of apnea or hypopnea from total or partial pharyngeal collapse during sleep. This study investigates the possible association between OSA and erectile dysfunction (ED).
Materials and Methods: A retrospective cohort study was conducted with 2 study groups: an OSA group and a matched non-OSA control group. The nationwide database from the National Health Insurance (NHID) was used. OSA was defined in a male patient if he had at least two outpatient service claims with the codes of OSA (ICD-9-CM code 780.51, 780.53, 780.57, 327.23) at any hospital or local medical clinic and received a polysomnography test or had a single hospitalization for OSA among the 4 claims diagnosis codes. In Taiwan, ED is diagnosed based on the results of a self-administered International Index of Erectile Dysfunction-5 questionnaire. ED (ICD-9 coded as 607.84) was identified only through a diagnosis made during admission or by a specialist during 3 hospital visits. Any diagnosed ED before OSA was excluded. All individuals in the NHID were encrypted for confidentiality.
Results: A total of 3831 OSA patients and 15324 age, gender, and index date matched non-OSA patients were followed at least 10 years. Approximately 65% of the group was younger than 50 years old, 24% was 50 to 65 years old, and 11% was older than 65 years old. Patients with OSA had a higher prevalence of ED.
Conclusion: The possible association between OSA and ED is shown from this nationwide study. Awareness of OSA and risk of developing ED is suggested for the physicians.

NDP080:
IDENTIFICATION OF MGCRAPGAP-INTERACTED SUBSTRATES DURING MAMMALIAN SPMIOGENESIS

Chung-Hsin Yeh [1,2], Ya-Yun Wan [3], Ying-Yu Wu [3], Han-Sun Chiang [2,3], Ying-Hung Lin [2,3]. [1] *Division of Urology, Shin Kong Wu Ho-Su Memorial Hospital, Taipei, Taiwan;* [2] *School of Medicine, Fu-Jen Catholic University, New Taipei City, Taiwan;* [3] *Graduate Institute of Basic Medicine, Fu-Jen Catholic University, Taiwan*

Purpose: It is estimated that 10- 15% of couples are infertile and male factors account for about half of the cases. Approximately 25% of the causes of male infertility are still unknown and the majority of infertile cases have defects in spermatogenesis. But large of those spermatogenesis are still unknown. We have previously identified novel testis-specific genes using

cDNA-microarray analysis of human testicular tissues. One of novel genes, Male Germ Cells Rab GTPase- Activating Proteins (MgcRabGAP), which is characterized by the conserved RabGAP catalytic domain, TBC (Tre2/Bub2/Cdc16) domain. RABGAPs are involved in various physiological processes (e.g., vesicular trafficking, cytoskeletal remodeling and cell migration) through inactivating RAB proteins. Next, we have found *MgRabcGAP* transcripts are mainly expressed in the mouse and human testes. And, the major of MGCRABGAP protein is expressed in the elongating and elongated spermatids. In clinical aspect, the amounts of *MGCRABGAP* transcript are reduced in the testicular tissues of men with various types of spermatogenic defect. The overall project is to determine the reproductive function of MGCRABGAP and its interacted- proteins (e.g., Rabs and small G proteins) during mammalian spermiogenesis.
Materials and Methods: We applied co-imuno-precipitations (co-IP) and subjected to liquid chromatography -mass spectrometry/mass spectrometry (LC-MS/MS) to identify MGCRABGAP interactors. The molecule-biological skills (e.g., Immunofluorescence staining, Cloning, Transfection, and Co-immunoprecipitation assay) used in this study.
Results: Several MgcRabGAP interacted-proteins have been identified through co-IP and LC-MS/MS e.g., RAB10, RAB5C, RAP1. We also verified the binding/activating ability between RAB10 and MGCRABGAP through transfection and co-immuno-precipiateion. Further, MGCRABGAP-RAB10 complexes are co-expressed at the developmental stages of the sperm-head and tail formation.
Conclusion: MGCRABGAP-RAB10 complexes are involved in sperm-head and tail formation at post- meiotic stages. This is first study suggesting the functional roles of MGCRABGAP-RAB10 complexes during mouse and human spermatogenesis.

NDP081:
THE EFFECT OF SMOKING ON SEMEN QUALITY IN FERTILE MEN: A META-ANALYSIS

Yuan-Hung Pong, Pei-Lin Huang, Vincent F.S. Tsai. *Department of Urology, Ten Chen Hospital, Taoyuan, Taiwan*

Purpose: Smoking is common in all countries and affects male fertiliy. This meta-analysis aimed to examine the impact of smoking on the quality of sperm.
Materials and Methods: The scientific databases of Medline, PubMed, Scopus, Google scholar, Cochrane Library, and Elsevier were searched to identify relevant articles published between 1995 to 2015. In the first step, 56 articles were selected. These studies were cohort, retrospective, cross-sectional, and case control studies that were found through electronic and hand search of references about smoking and male fertility in healthy men. The outcome measurement was the differences between smokers and non-smokers in semen parameters. A total of 10 articles including 2,554 men were ultimately included in a meta-analysis to examine the impact of smoking on sperm parameters. Statistical analysis was performed using Comprehensive Meta-Analysis Ver 3. For the heterogeneity of studies, Cochran's Q test and index I^2 were used. Forest plots were calculated by Hedges's g value. Because of heterogeneity, DerSimonian and Laird random effects model was used.
Results: The Hedges's g value in ejaculation volume is −0.634 (SE: 0.185, p = 0.001). The 95% confidence interval (CI) is −0.996 to −0.271. The Hedges's g value in concentration is −0.968 (SE: 0.258, p = 0.000). The 95% confidence interval (CI) is −1.474 to −0.462. The Hedges's g value in mortility is −0.857 (SE: 0.083, p = 0.000). The 95% confidence interval (CI) is −1.019 to −0.694. The Hedges's g value in abnormal form is 0.915 (SE: 0.123, p = 0.000). The 95% confidence interval (CI) is 0.674 to 1.155.
Conclusion: The results of this meta-analysis showed that smoking reduces ejaculation volume, sperm concentration, sperm motility and increased abnormal form of sperm.

NDP082:
PRELIMINARY REPORT OF THERAPEUTIC EFFICIENCY WITH FOCUSED MODE EXTRACORPOREAL SHOCK WAVE THERAPY COMBINED VACUUM ERECTILE DEVICE IN PATIENTS WITH PEYRONIE'S DISEASE

Yuan-Po Tu, Fu-Shun Hsu, Chen-Wei Chou. *New Taipei City Hospital, Taiwan*

Purpose: To evaluate the effect of focused mode Extracorporeal Shock Wave Therapy (ESWT) combined Vacuum Erectile Device (VED) for the treatment of patients with peyronie's disease (PD).
Materials and Methods: This study has enrolled two patients with a history of PD not more than 12 months who had not received any previous medical therapy or surgical intervention. As was shown in the earlier reports, the ESWT and VED treatments has been applied as the alternative conservative therapy for PD, the two patients received the new therapeutic protocol VEEST 6 weeks with focused mode Extracorporeal Shock Wave Therapy combined Vacuum Erectile Device. To analyze the efficacy of treatment by VEEST, cases were graded by IIEF-5; Numeric Rating pain Scale (NRS), and measured plaque size in cm2, penile curvature in degrees.
Results: At the end of new treatment course, two cases of peyronie's disease, which IIEF-5 score were significantly increased and NRS significantly decreased compared with the pre-treatment data ($P < 0.01$); Penile plaque size and angle curvature reveals the significant improvement with decreased size and reduction degree after six week VEEST therapy.
Conclusion: For patients of peyronie's disease, the new therapeutic protocol VEEST with focused mode Extracorporeal Shock Wave Therapy combined Vacuum Erectile Device can effectively treat the troublesome symptoms of PD in an relatively short therapeutic time based on the marked increase of the IIEF-5 rating score; decreased NRS scale and improved result of penile plaque size and angle curvature.

NDP083:
THE IMPACT OF PREMATURE EJACULATION ON THE PARTNERS' SEXUAL FUNCTION

Te-Fu Tsai [1,4], Ji-Fan Lin [2], Shan-Che Yang [2], Hung-En Chen [1], Yi-Chia Lin [1,4], Kuang-Yu Chou [1,4], Thomas I-Sheng Hwang [1,3,4]. [1] *Department of Urology, Shin Kong Wu Ho-Su Memorial Hospital, Taiwan;* [2] *Central Laboratory, Shin Kong Wu Ho-Su Memorial Hospital, Taiwan;* [3] *Department of Urology, Taipei Medical University, Taiwan;* [4] *Division of Urology, School of Medicine, Fu-Jen Catholic University, Taipei, Taiwan*

Purpose: PE is the most common male sexual dysfunction, the prevalence rates for PE in men across a broad age range are approximately 20% to 30%. The distress induced by PE affects not only the male, but also his sexual partner. The study is to evaluate the impact of premature ejaculation on the partners' sexual function.
Materials and Methods: From January of 2013 to December of 2015, 136 females who were not menopause were enrolled in the study. The case group comprised68 women whose partner complaining of PE and the control group comprised 68 women whose partner did not fill the criteria of PE. PE was defined using the Diagnostic and Statistical Manual of Mental Disorders 4th Edition, Text Revision (DSM-IV-TR) criteria [4] for at least 6 months and an intravaginal ejaculatory latency time (IELT) of 2 min and less, measured using a stopwatch, for over 75% sexual intercourse. The Female Sexual Function Indexwas used to determine the female participants' sexual function. Multiple regression procedure was used to identify the impact of PE on the partner's sexual function.
Results: There was no statistically significant difference in desire, arousal and pain domain between the groups. Lubrication ($p = 0.01$), orgasm ($p = 0.002$), satisfaction ($p < 0.0001$), and total FSFI score ($p = 0.02$) were significantly lower in cases than controls. The multivariate analysis and adjusting the model for potential confounding factor, the score of orgasm domain andsatisfaction domain in cases group is lower thanthe controls group (0.76 points, $p = 0.02$ and 1.1 points, $p = 0.0003$ respectively).
Conclusion: PE has a negative effect not only on the satisfaction but also on the orgasm of the sexual partner.

NDP084:
OPEN SUBINGUINAL VARICOCELECTOMY FOR MALE INFERTILITY PATIENTS, NATIONAL TAIWAN UNIVERSITY HOSPITAL EXPERIENCE

Yann-Ron Su [1], Hong-Chiang Chang [1], Ju-Ton Hsieh [2]. [1] *Department of Urology, National Taiwan University Hospital Hsin-Chu Branch, Hsinchu, Taiwan;* [2] *Department of Urology, National Taiwan University Hospital, Taipei, Taiwan*